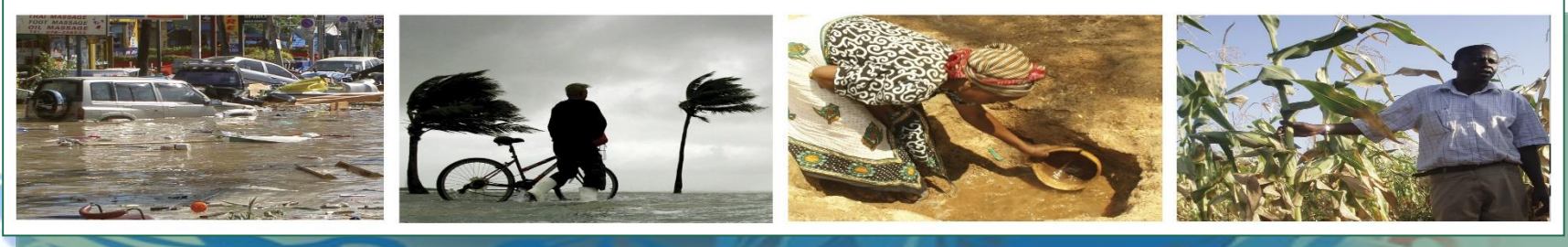


# Advancing Energy Efficiency in the Policy Arena: Bangladesh Perspective



**Mohammed Shahadat Hussain**  
Memeber

**Sustainable and Renewable Energy Development Authority (SREDA)**  
**Power Division, M/o Power Energy and Mineral Resources**

**05 June 2018**



# Clean Energy on International Agenda [SDGs]

Paris Agreement

+1.5°C - +2°C







# Legal and Regulatory Framework



Energy Efficiency  
Identify as third  
fuel



44 programs  
taken within six  
strategic  
areas: food  
security, social  
protection and  
health; disaster  
management;  
infrastructure;  
research;  
mitigation and low  
carbon  
development; and  
capacity building



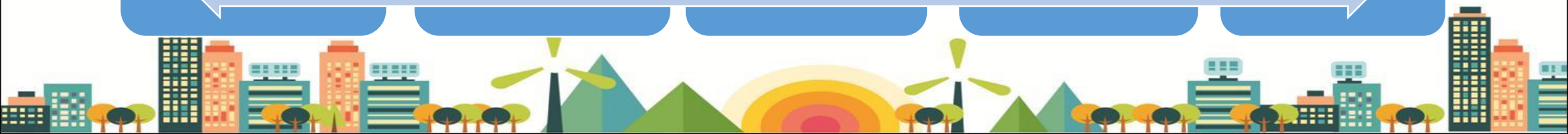
Set the  
emission  
standards



Set a target to  
generate 10%  
electricity from  
RE sources by  
2020

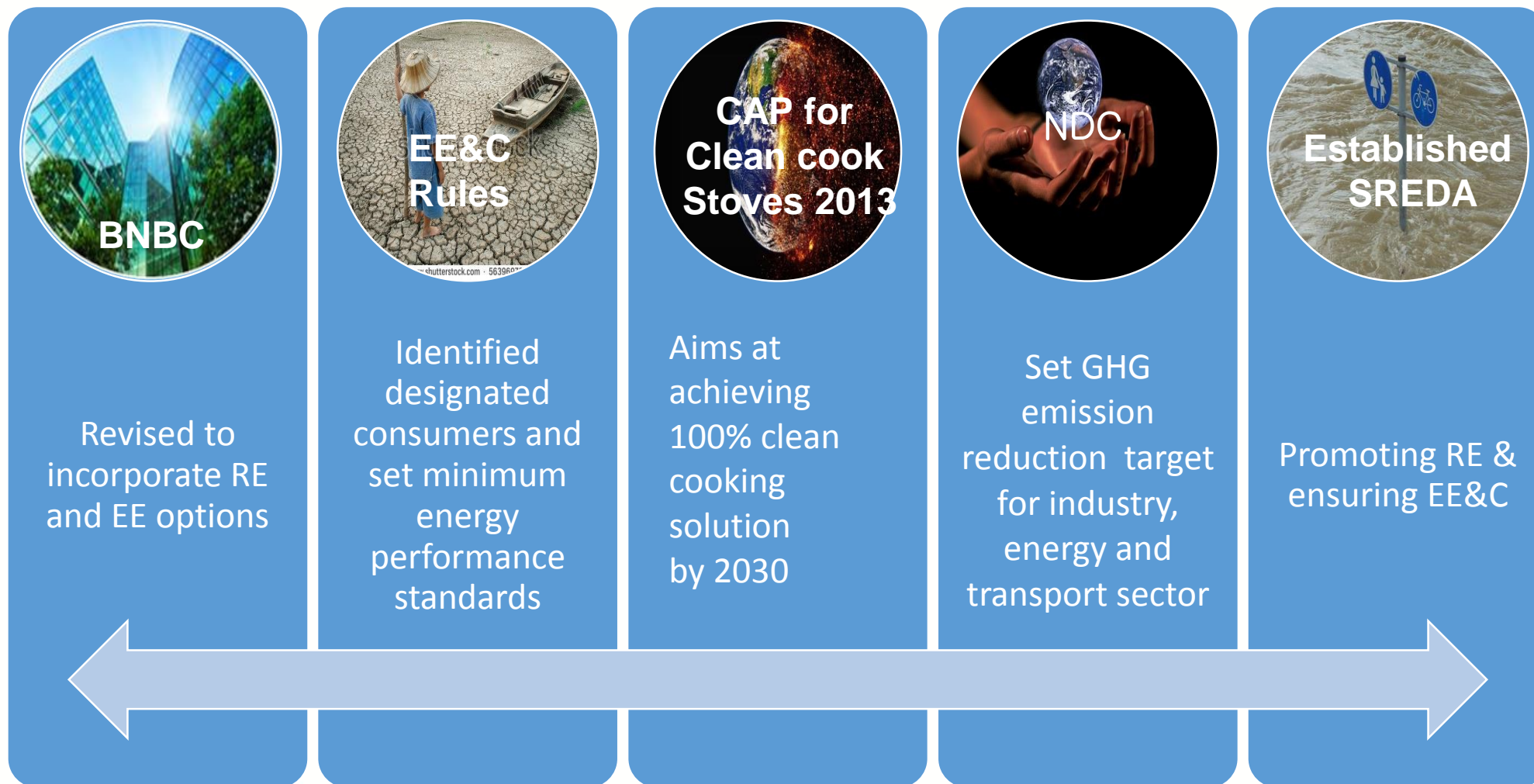


Three Major  
program  
identified





# Legal and Regulatory Framework





# SDG Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

**SDG Indicators:** 7.1.1 Proportion of population with access to electricity

❖ **Activities in 7<sup>th</sup> Five Year Plan:**

- Access electricity to all by 2021 (Vision 2021)
- Implementation of DSM and Energy Conservation
- Develop Energy Subsidy Policy

❖ **Other Policy Target:**

- Install 40,000MW equivalent capacity of power generation plant by 2030
- Transform simple cycle power stations in to combined cycle power station
- Develop Waste Heat Recovery policy to tap waste heat and steam from power stations for further productive use of it in industries





# SDG Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

❖ **SDG Indicators:** 7.1.2 Proportion of population with primary reliance on clean fuels and technology

❖ **Activities in 7<sup>th</sup> Five Year Plan:**

- Increase promotion of Improved Cooking stove (ICS)
- Develop Financial Incentive Mechanism for Improved Cooking Stove

❖ **Other Policy Target:**

- 60% market share of improved biomass cookstoves, reaching 18 million households by 2030 (INDC)
- 40% market share of improved gas cookstoves (INDC)
- 100% clean and efficient cooking solutions by 2030 which indicates dissemination of cook stoves to over 30 million households in Bangladesh by 2030. (CAP)





# SDG Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

**SDG Indicators:** 7.2 Renewable energy share in the total final energy consumption

## ❖ Activities in 7<sup>th</sup> Five Year Plan:

- Set a target of 10% of the total electricity to be met from renewable resources by FY2020
- Exploring possibilities for producing energy from waste.

## ❖ Other Policy Target:

- 10% of the total electricity to be met from renewable resources by FY2020 (RE Policy 2008)
- Explore potential of wind energy



# SDG Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

❖ **SDG Indicators:** 7.3.1 Energy intensity measured in terms of primary energy and GDP

## ❖ **Activities in 7<sup>th</sup> Five Year Plan:**

- Implementation of Energy Management system for industries
- Standardization and labelling of energy efficient electrical appliances & equipment
- Incorporate and introduce Green Building Code in our National Building Code.

## ❖ **Other Policy Target:**

- **15% and 20% reduction** of primary energy consumption per GDP by 2021 and 2030 (EE&C Master Plan)
- A conditional 15% reduction in GHG emissions from BAU levels by 2030 in the power, transport, and industry sectors(**NDC**)







# Bangladesh's NDC – a summary



## Intended Nationally Determined Contributions (INDC)

September, 2015

Ministry of Environment and Forests (MOEF)  
Government of the People's Republic of Bangladesh

1

### Key points

- Bangladesh is a highly climate vulnerable country with less than 0.35% of global GHG emissions.
- The main focus of Bangladesh's activities is on adaptation – increasing resilience to the impacts of climate change.
- Bangladesh committed to reduce GHG emissions in the power, industry and transport sectors by 5% 'unconditionally' below "business-as-usual" GHG emissions by 2030, or by a "conditional" 15% below "business-as-usual" GHG emissions within 2030 if sufficient and appropriate support is received from developed countries
- Bangladesh therefore wants to play its part in global collective action to reduce GHG emissions.
- Set out proposals for governance and coordination of NDC implementation and key next steps.
- Described Bangladesh's support needs, with some examples of indicative costs of taking action on mitigation and adaptation.





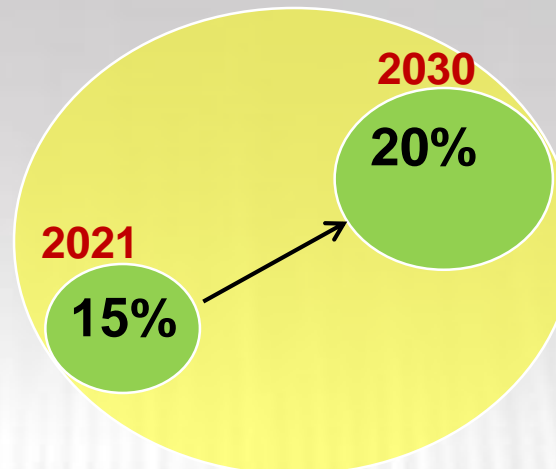
# Energy Efficiency Master Plan up to 2030 Roadmap





# Target of Energy Efficiency

Both Public and Private sector investment involve in Energy Efficiency and Conservation promotion



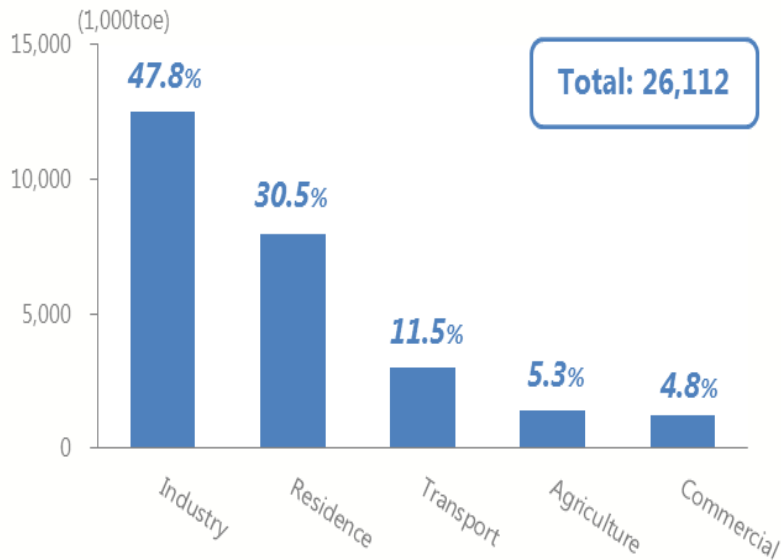
2021: 15% Improvement of Primary Energy Consumption per GDP  
2030: 20% of the same above  
(Baseline as of FY 2013/14)





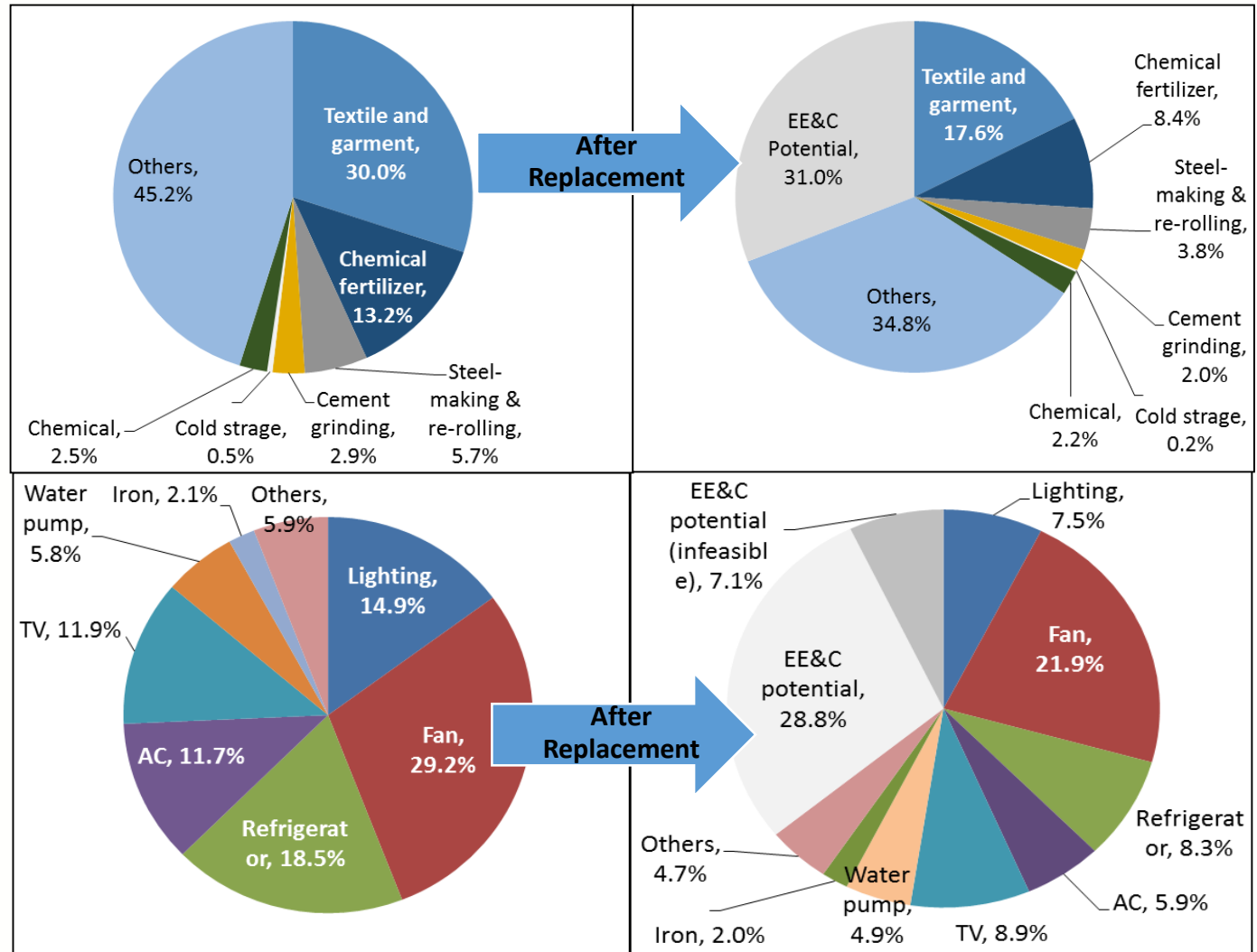
# Energy Consumption by Sector in Bangladesh

- Industrial sector and Residence sector share most of energy consumption



Notes: 1. Primary energy basis: excluding biomass,  
2. Electricity: 2,867kcal/kWh (thermal efficiency 30% basis)

EE&C Potential of Industrial Sector is estimated as 31%



EE potential in Residential is estimated 30%

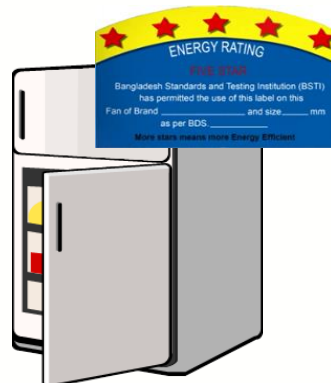


# Objectives of Energy Efficiency Program

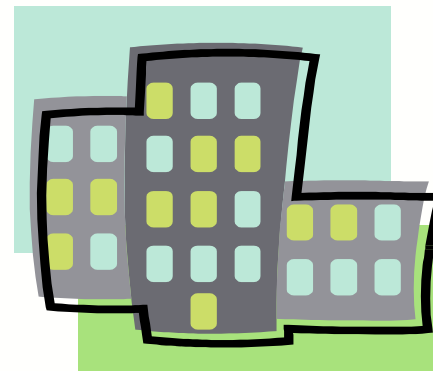
How to implement EE&C programs effectively



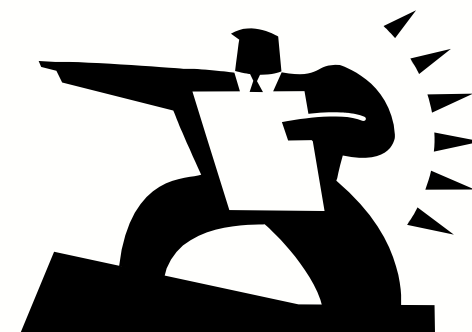
Energy Management



EE Labeling



EE Building



Government Support



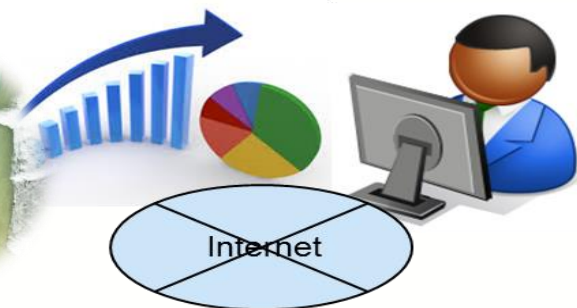
Fiscal & Financial Incentive



Climate Change Mitigation



Improve cook stove



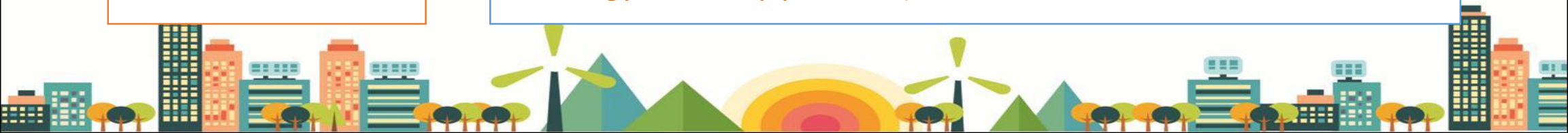
IT & Awareness



## Achievement in last 2 years

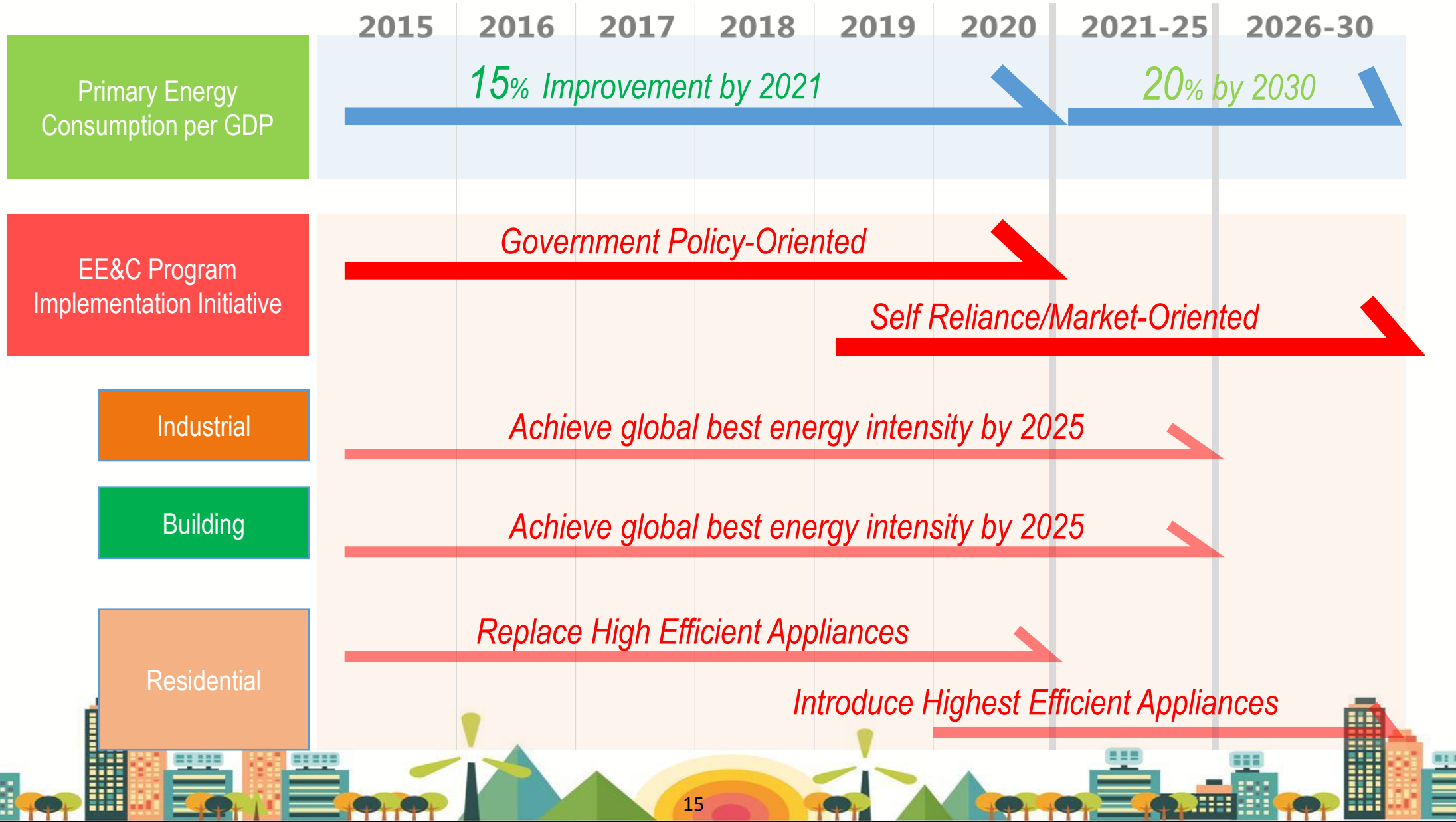


- Prepared Energy Efficiency and conservation Rule 2016
- Prepared Energy Efficiency and Conservation Master Plan
- Prepared Energy Audit Regulation 2017
- Prepared draft Standard and Labeling Regulations for electric appliances
- Developed draft Green Building Rating System
- Starting Energy Auditor Training and Certification program
- Started Energy Efficiency Financing program with concessional financing
- Started EE&C schooling program and painting competition
- **Energy intensity per GDP reduced to 3.56 ktoe in 2016-17 from 3.72 ktoe of 2013-14 (reduced 4% energy intensity per GDP)**





# Roadmap till 2030



Renewable Energy and  
Energy Efficiency are the  
sustainable option to  
combat climate change and  
to ensure energy security







Thank You!

